

Assessing Best-Worst Scaling in Consumer Value Research

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Abstract

The traditional approach to consumer values measurement is through the use of ubiquitous rating scales. However, the use of rating scales is prone to various response style biases such as social desirability bias, acquiescence bias and extreme response bias. As consumer values are inherently positive constructs, respondents often exhibit little differentiation among the value dimensions when measured using rating scales. Best-Worst Scaling (BWS) overcomes these problems by asking respondents to make trade-offs among the value dimensions being assessed. In spite of its many advantages and growing use in consumer research, the ipsative data problem associated with BWS has not been well understood. The purpose of this study is to shed some light on the ipsative data problem and its implications for consumer value researchers.

Keywords: consumer values measurement, best-worst scaling, ipsative data problem.

Track: Market Research

1.0 Introduction

Due to advantages of the Best-Worst Scaling (BWS) method, it has been well established in recent years as the preferred method in consumer value measurement to overcome the inherent biases of traditional rating scales (Louviere et al., 2013; Marley & Louviere, 2005). BWS overcomes rating scales response style biases by asking respondents to make trade-offs among the value dimensions being assessed (Lee et al., 2008). It has also been found to be easy for respondents to understand in comparison with other methods such as rating scales and ranking scales (Chrzan & Golovashkina, 2006; Marley & Louviere, 2005). It has been effectively employed to replicate Schwartz's (1992) values circumflex structure (Lee et al., 2008) and Kahle's (1983) List of Values (LOV) theory (Lee et al., 2007).

In spite of its many advantages and growing use in consumer research, the ipsative data problem (a common total test score for all individuals) associated with BWS has not been well understood. Most of the BWS studies have ignored this issue and focused instead on mean differences on an aggregated level (Burke et al., 2013; Lee et al., 2007) or on mean differences between segments (Mueller & Rungie, 2009; Wedel & Kamakura, 1999). The purpose of this study is to shed some light on the ipsative data problem and its implications for consumer value researchers.

The remainder of the paper is organized as follows: First we provide a background of the BWS method and discuss its unique advantages. We then discuss the ipsative data problem associated with the BWS method. Next we present evidence from an empirical study of using BWS to measure consumption-related values (Holbrook, 1994, 1999; Sheth et al., 1991) and Kahle's (1983) List of Values and conclude by discussing the implications of our study and avenues for future research.

2.0 Background of the BWS Method

The BWS method was first introduced by Finn and Louviere (1992) to measure the relative importance of food safety against other areas of public concern. The formal mathematical proofs about its measurement properties were provided in Marley and Louviere (2005). BWS is a comparatively new method of measurement that has a number of advantages (Louviere et al., 2013). The BWS method effectively permits respondents to evaluate all pairwise combinations of alternatives presented in a particular subset leading to the assumption that their 'best' and 'worst' choices represent the maximum difference in utility between all the items. Therefore, the BWS method has been found to achieve comparatively the most accurate and reliable data which has provided researchers with the highest level of discrimination between items, thus having a higher tendency to predict what they are intended to predict (Cohen, 2003). Consequently, the BWS technique is the best solution to solve the problems of 'end-piling' related to the use of ratings scales, where respondents systematically respond positively to each item. Moreover, the BWS method asks the same item multiple times, thus increasing the reliability of the test (Lee et al., 2008). Furthermore, acquiescence and extremity response biases are also reduced in comparison to traditional rating scales as the construction of the best–worst choice task does not allow respondents the opportunity to distort their true choice (Lee et al., 2007).

With an appropriate experimental design, such as a balanced incomplete block design (BIBD) where items within the experiment are balanced and adequately randomized (Green, 1974), the error component of the utility of the maximum difference pair in the subset can be estimated. The major benefit of using a BIBD design in BWS is its capability of greatly decreasing the number of choice sets to be evaluated while maintaining the balanced appearance and co-appearance of items across the sets. The number of items that appear in each set ideally must be fixed at three or more (Green, 1974; Raghavarao & Padgett, 2005). In a BIBD design, no item appears more than once in a block; every pair of items appears in the same number of blocks; each block is of equal size; and every item appears equally (Massey et al., 2013).

In addition, BIBD designs allow a relative importance scale to be derived for further statistical analysis. If each item in the experiment has been shown an equal number of times, by simply aggregating the number of times a particular item has been chosen by an individual as the 'best' (most important), and subtracting the amount of times it has been chosen as the 'worst' (least important) across the whole experiment, an importance scale can be derived. This scale is commonly referred to as the “best minus worst” (BMW) scores, and it is a simple and straightforward method which has been shown to closely approximate true scale values as derived through multinomial logit analyses (Flynn et al., 2007). This importance scale can then be used to construct an individual importance rating for comparisons across the sample (Auger et al., 2007) and to provide interval level data for further multivariate research (Marley and Louviere, 2005). Furthermore, BIBDs allow users to attain more data from each respondent because a typical BIBD design encompasses three or more replications that increase the effective sample size and allow one to gain more efficient estimates (Raghavarao & Padgett, 2005). In summary, the BWS method has been proven to be simple and easy to complete and does not require too much training to undertake them (Flynn et al., 2007). For that reason, the BWS method has been applied in a wide range of contexts to investigate a wide variety of problems (Burke et al., 2013).

3.0 Ipsative Data Problems

Even though the BWS method has been proven in the extant literature to be a preferred method to rating and ranking scales, it is one kind of forced-choice methods in which respondents have only one way to select the best or worst item as it has no option for using the middle, the end points or one end of the scale (Cohen, 2003). In fact, it forces respondents to discriminate among the items by selecting the most important or least important from a series of choice sets typically defined by a BIBD. Although these types of comparative judgment can lessen the impact of various response style biases that are common in rating scales, traditional scoring procedures for the BWS method produce ipsative data problems, whereby all individuals have a common total test score (Brown & Maydeu-Olivares, 2011, 2012, 2013). Let us explain it by using an example with the BWS format. As discussed earlier, the BWS method asks about one item multiple times across subsets. Suppose in a block of seven, seven items (in this case, they are consumption-related value dimensions) have been measured where each item has been shown three times across the subset. If the best minus worst (BMW) scoring procedure is used, the results of two respondents are as given below:

	Most	Least	M-L
Functional Value(Quality)	3	0	3
Functional Value(Price)	2	0	2
Social value	1	1	0
Emotional value	0	2	-2
Epistemic value	0	3	-3
Aesthetic value	1	1	0
Altruistic value	0	0	0
Total score	7	7	0

	Most	Least	M-L
Functional value(Quality)	1	0	1
Functional value(Price)	0	3	-3
Social value	0	2	-2
Emotional value	1	1	0
Epistemic value	3	0	3
Aesthetic value	2	0	2
Altruistic value	0	1	-1
Total Score	7	7	0

Whilst the two respondents' responses are different in their choices, the total test score produces the same result for these two individuals (i.e. the ipsative data problem). Due to the ipsative data problem, the correlation matrix of the items will produce one zero eigenvalue that restricts the use of factor analysis and violates the basic assumption of classical test theory (Brown & Maydeu-Olivares, 2012). Furthermore, the covariance between a questionnaire's scales and any external criterion must sum to zero because the zero variance of the total score and reliability coefficients are misleading in forced-choice methods as the ipsative data problem disrupts the underlying assumption of classical test theory (Brown & Maydeu-Olivares, 2012).

Lee, Soutar, and Louviere (2008) claimed that the square root of the best count divided by the worst count ($\sqrt{B/W}$) scoring procedure should be free from the ipsative data problem and that factor analysis could be performed well. Moreover, Davidson (2013) used Best-Minus Worst (BMW) scoring procedure and dropped one item to test the measurement model via classical test theory to go around the ipsatisation problem. However, no concrete evidence has been presented to support their claims.

4.0 Empirical Study of Using BWS to Measure Consumer Values

Given the limited and incomplete research on how to deal with the ipsative data problem for the BMW scores, this study attempted to fill this research gap by presenting evidence from an empirical study of using BWS to measure seven consumption-related values (Holbrook, 1994, 1999; Sheth et al., 1991) and Kahle's (1983) list of nine personal values.

In view of the importance of both tangible and intangible features in the restaurant environment, we selected the restaurant services sector as our research setting for exploring utilitarian and hedonic value dimensions. The seven consumption-related consumer values were based on the Theory of Consumption Values proposed by Sheth et al. (1991) and Holbrook's (1994, 1999) consumer value typology. They were adapted to the restaurant services context as follows: First, the functional value dimension of quality is represented by items of "high quality, tasty food, & healthy option". Second, the functional value dimension of price is represented by items of "reasonable price, economical, & value for money". Third, the social value dimension is represented by items of "feeling acceptable, good impression, & social approval". Fourth, the emotional value dimension is represented by items of "happiness, sense of joy, & gives pleasure". Fifth, the epistemic value dimension is represented by items of "satisfy curiosity, variety of menu, & new experience". Sixth, the aesthetic value dimension is represented by items of "design decoration, appearance of staff, & table arrangement". Finally, the altruistic value dimension is represented by items of "ecologically produced, coherent with your ethics & moral values".

The questionnaires were distributed online by a marketing research company in Australia to its nationwide online panel members comprising regular visitors to restaurants. The online research company's panel members were 18 years of age or older and the proportions were female (51.3%) and male (48.7%). The survey questionnaire was distributed online to a total of 610 Australian consumers and finally 317 complete responses were collected that exceeds a 50% response rate.

This study at first used the best minus worst (BMW) scoring procedure for both the seven consumption-related consumer values and nine personal values to test how factor analysis findings are affected by the ipsative data problem with this scoring method. As expected, we found that the correlation matrix produced by factor analysis had a zero determinant and the matrix was not a positive definite for both cases. In addition, the average off-diagonal covariance had negative values due to the ipsative data problem and one item had a zero eigenvalue, thus precluding the use of factor analysis. Therefore, we can conclude that the BMW scoring procedure was severely affected by the ipsative data problem that violated the basic underlying assumption of classical test theory.

In the next stage of data analysis, this study used the square root of the best and worst scoring procedure to test whether or not this alternative scoring method can solve the ipsative data problem as suggested by Lee et al. (2008). Although this Sqrt(B/W) scoring procedure did not produce the same total scores for each individual, we found the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was less than 0.50 for both consumption-related consumer value and personal values constructs, thus indicating the inappropriateness of factor analysis (Hair et al., 2010). Therefore, this study has contradicted the claim made by Lee et al. (2008) and has concluded that Sqrt(B/W) scores are still suffering from the ipsative data problem, thus violating the underlying assumption of classical test theory.

We also used our empirical data to test Davidson's (2013) alternative way of dealing with the ipsative data problem for the BMW scores. The logic behind Davidson's (2013) 'dropping one item' approach was that the sum of the remaining BMW scores would no longer be a constant zero for each individual; their correlation matrix would have a non-zero determinant; and the scores would no longer be linearly dependent. The 'dropping one item' approach seems, on the surface, to have solved the ipsatisation problem. However, we found this approach also resulted in a low KMO measure of sampling adequacy (MSA) values

(below 0.50), which is too low for a meaningful factor analysis. Therefore, we conclude that the dropping one item approach is not an appropriate solution to the ipsative data problem. The empirical results are summarized in Table 1.

Table 1: Empirical Findings Regarding Ipsative Data Problems with BWS Method

BWS Scoring Procedure	Findings of Factor Analysis
Best minus Worst (BMW) Scored data	The correlation matrices produced by factor analysis had a zero determinant and the matrices were not positive definite for both constructs. Moreover, the average off-diagonal covariance had negative values due to the ipsative data problem and one item had a zero eigenvalue for both constructs.
Square root of the ratio of the Best and Worst Scores	The KMO measure of sampling adequacy for the multi-dimensional perceived value construct was 0.041 and all individual MSA values were less than 0.50. In addition, The lower MSA values for overall KMO (0.052) and lower individual MSA values (below 0.50) in terms of the personal values construct raising a question about the appropriateness of factor analysis (Hair et al. 2010).
Dropping One Item with Best minus Worst Score	This study still found a low KMO measure of sampling adequacy (MSA) values for both constructs (below 0.50), inappropriate for a meaningful factor analysis (Hair et al. 2010).

5.0 Discussion and Conclusions

Best-Worst Scaling has become a popular new method to measure consumer values. It has many advantages over traditional consumer value measurement via rating or ranking scales. However, the ipsative data problem associated with BWS has still not been well understood by consumer value researchers. In this study, we have confirmed that the best minus worst (BMW) scoring procedure will produce ipsative scores that will preclude the use of factor analysis and structural equation modelling. We have also provided empirical evidence to show that neither the Sqrt(B/W) scoring procedure suggested by Lee et al. (2008) nor Davidson's (2013) 'dropping one item' approach was effective in solving the ipsative data problem. Our findings suggest that consumer value researchers should be made aware of this hidden data problem.

BWS can provide good data if the research goal is to obtain a clear-cut reading of the relative importance of consumer value items. Such data can also be used to compare mean differences among different demographic and/or attitudinal segments. Cluster analysis of the BMW scores can allow a researcher to examine heterogeneity across the individual respondents and uncover meaningful segments. It is also worth noting that one can also run cluster analysis across the BMW items to identify meaningful factor structure. We found this cluster analysis approach to be a good substitute for factor analysis to explore the factor structure underlying the BMW scores. One avenue for future consumer value research is to compare the effectiveness of different clustering algorithms in finding the underlying consumer value structure.

Another avenue for future consumer value research is to explore the use of item response theory (IRT) based on Thurstone's (1927) law of comparative judgment to solve the ipsative data problem. Although Brown and Maydeu-Olivares (2013) have claimed success in using this approach to solve problems of ipsative personality data via the use of Mplus software (Muthén & Muthén 1998-2010), their finding is yet to be replicated in consumer value research literature.

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Welcome from the Conference Chair



Welcome to the ANZMAC 2014 Conference!

On behalf of Griffith University, our colleagues within Social Marketing @ Griffith, Griffith University's Department of Marketing, and the local organising team, we are delighted that you are able to participate in ANZMAC 2014.



This year's conference attracted nearly 500 submissions from 36 countries. More than 200 submissions came from overseas, from countries as remote as Portugal, Norway and Brazil showcasing the truly international field attracted to ANZMAC. Three hundred and eighty-two papers were accepted for presentation, giving an acceptance rate of 79%. In addition 22 posters and 7 special session proposals were submitted to ANZMAC 2014, providing further insight into some of the emerging issues in marketing. We were very impressed with the standard and diversity of the submissions, which should make for a high-quality and memorable event. We are confident that regular ANZMAC attendees will enjoy this year's conference location, and would like to extend a special welcome to our international colleagues travelling from afar and those attending an ANZMAC Conference for the first time.



The theme for ANZMAC 2014 is Agents of Change. ANZMAC 2014 showcases how marketing has been used effectively as an agent of change in both social and commercial settings. Marketers have long been recognised for their ability to stimulate demand, assisting corporations to sell products, services and ideas in ever-increasing quantities and/or with improved efficiencies. Informed by the marketing discipline, social marketing is developing an increasing evidence base demonstrating its effectiveness in changing behaviours for social good. Increasingly, governments and non-profit agencies across the globe are recognising marketing's potential as an agent of change.

The first day of the conference will begin at the site of the G20 Summit, namely the Brisbane Convention and Exhibition Centre. Professor Gerard Hastings, OBE will open the conference with a thought provoking presentation on the need for marketers to empower people to demand the changes needed to reduce damage to themselves and their planet. Gerard is the first UK Professor of Social Marketing and founder/director of the Institute for Social Marketing and Centre for Tobacco Control Research, at Stirling and the Open University. Gerard researches the applicability of marketing principles like consumer orientation, branding and strategic planning to the solution of health and social problems. Gerard also conducts critical marketing research into the impact of potentially damaging marketing, such as alcohol, tobacco and fast food promotion.

Our Monday evening involves a welcome reception that will be hosted by the Shore Restaurant and Bar at the centre of Brisbane's premier culture and entertainment precinct - South Bank. We would like to encourage you to explore the area throughout your stay in Brisbane, try one of South Bank's restaurants or enjoy an early morning swim in Australia's only inner-city, man-made beach. For the Wednesday evening gala we will return to the Brisbane Convention and Exhibition Centre to enjoy a dinner, drinks and live music.

We would like to thank the many individuals who willingly donated their time and effort to assist in organising the ANZMAC 2014 Conference in Brisbane. Firstly, our thanks go to all submitting authors who chose our annual conference as the way to share their research and ideas with the ANZMAC community and the wider community of marketing scholars. Without their continuous support we would never be able to stage such a successful conference. Secondly, we would like to acknowledge thirty Track Chairs who encouraged the submission of many papers and helped with the review process. In particular, we would like to acknowledge the many reviewers who gave up a considerable amount of time to review the papers submitted to the conference. Their time and expertise were critical in developing the conference program. Thirdly, we also would like to thank our local organising team, and in particular Victoria Aldred from the ANZMAC Office and two ANZMAC 2014 Conference Administrative Assistants - Bo Pang and Francisco Crespo Casado - for their assistance with many administrative tasks at various stages during the

conference organising process. They have been working tirelessly ten days a week. Last but not least, all our sponsors deserve a special thank you for providing additional support to make ANZMAC 2014 possible. The ANZMAC 2014 Conference would have not been possible without their generous support.

We hope you will enjoy a stimulating and rewarding conference and experience all the benefits of Brisbane's early summer.

**Professor Sharyn Rundle-Thiele, Dr Krzysztof Kubacki and Dr Denni Arli
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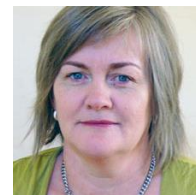


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Professor Andrew McAuley,
Southern Cross University

Services
Marketing



Dr Cheryl Leo,
Murdoch University



Professor Jill Sweeney,
University of Western Australia

Distribution



Dr Owen Wright,
Griffith University



Dr Anna Watson,
University of Hertfordshire

Digital
Marketing and
Social Media



Robin Croft,
University of Bedfordshire



Dr Dirk vom Lehn,
King's College London

Industrial
Marketing



Greg Brush,
University of Western Australia

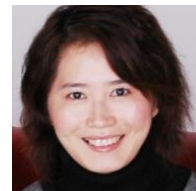


Dr Sharon Purchase,
University of Western Australia

Sustainable
Marketing

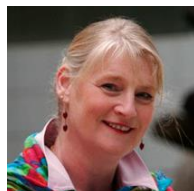


Associate Professor Angela
Paladino,
The University of Melbourne

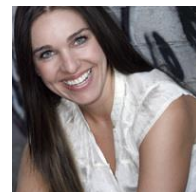


Dr Jill Lei,
The University of Melbourne

Consumer
Culture Theory



Dr Jan Brace-Govan,
Monash University



Dr Lauren Gurrieri,
Swinburne University of
Technology

Food Marketing



Associate Professor Meredith
Lawley,
University of Sunshine Coast



Dr Dawn Birch,
Bournemouth University

Keynote Speaker

Moving Beyond Behaviour Change: a 21st Century Agenda for Social Marketing

Professor Gerard Hastings, University of Stirling, United Kingdom



Gerard Hastings is the first UK Professor of Social Marketing and founder/director of the Institute for Social Marketing (www.ism.stir.ac.uk) and Centre for Tobacco Control Research (www.ctcr.stir.ac.uk) at Stirling and the Open University. He researches the applicability of marketing principles like consumer orientation, branding and strategic planning to the solution of health and social problems. He also conducts critical marketing research into the impact of potentially damaging marketing, such as alcohol, tobacco and fast food promotion.

ANZMAC 2014 Conference Program Outline

MONDAY 1 DECEMBER 2014

Welcome and keynote address | Brisbane Convention and Exhibition Centre

7.30-8.45 am Conference Registration
Boulevard Auditorium

9.00-9.15 am Formal welcome

9.15-10.00 am Keynote speaker
Professor Gerard Hastings

Concurrent sessions | Griffith University South Bank campus

10.00-11.00 am Morning tea
S02, 7.07 / S06, 2.02 / Undercroft (between S02 and S05)—near Security

11.00 am-12.30 pm Session 1

12.30-1.30 pm Lunch
S02, 7.07 / S06, 2.02 / Undercroft (between S02 and S05)—near Security

1.30-3.00 pm Session 2

3.00-3.30 pm Afternoon tea
S02, 7.07 / S06, 2.02 / Undercroft (between S02 and S05)—near Security

3.30-5.00 pm Session 3

5.00-6.00 pm Session 4—Poster session ANZMAC AGM
S05, 2.04

6.00-8.00 pm Welcome cocktail function
The Shore Restaurant and Bar, Arbour View Cafes

TUESDAY 2 DECEMBER 2014

Concurrent sessions | Griffith University South Bank campus

7.30-9.00 am		ANZMAC Executive Breakfast S02, 7.16
9.00-10.30 am	Session 5	
10.30-11.00 am	Morning tea S02, 7.07 / S06, 2.02 / Undercroft (between S02 and S05)—near Security	
11.00 am-12.30 pm	Session 6	
12.03-1.30 pm	Lunch S02, 7.07 / S06, 2.02 / Undercroft (between S02 and S05)—near Security	AMJ Lunch S07, 2.16 / 2.18
1.30-3.00 pm	Session 7	
3.00-3.30 pm	Afternoon tea S02, 7.07 / S06, 2.02 / Undercroft (between S02 and S05)—near Security	
3.30-5.00 pm	Session 8	
5.00 pm	Free evening	

WEDNESDAY 3 DECEMBER 2014

Concurrent sessions | Griffith University South Bank campus

9.00-10.30 am Session 9

10.30-11.00 am Morning tea
S02, 7.07 / S06, 2.02 / Undercroft (between S02 and S05)—near Security

11.00 am-12.30 pm Session 10

12.30-1.30 pm Lunch Institutional Members /
S02, 7.07 / S06, 2.02 / Undercroft (between S02 Heads of School Lunch
and S05)—near Security S07, 2.16 / 2.18

1.30-3.00 pm Session 11

3.00-3.30 pm Afternoon tea
S02, 7.07 / S06, 2.02 / Undercroft (between S02 and S05)—near Security

3.30-5.00 pm Session 12

7.00-11.45 pm Gala dinner
Brisbane Convention and Exhibition Centre

Doctoral Colloquium Program Outline

SATURDAY 29 NOVEMBER 2014		Graduate Centre (S07)
8.00-9.00 am	Registration and Greetings	Foyer
9.00-9.15 am	Welcome from the DC Co-chairs Dr Denni Arli and Associate Professor Helene Cherrier	Room 2.16-2.18
9.15-10.15 am	An Opening Workshop— Advancing Your Early Academic Career Associate Professor Ekant Veer (University of Canterbury)	Room 2.16-2.18
10.15-11.15 am	Workshop 2— Life as an Academic, A Creative, Sustained and Fun Adventure Professor Russell Belk (York University)	Room 2.16-2.18
11.15-11.45 am	Coffee break	Graduate Centre (S07)
11.45 am-1.15 pm	PhD Presentations (see Student presentation schedule)	Room 2.16-2.19, 3.01, 3.03, 3.07
1.15-2.15 pm	Lunch	Graduate Centre (S07)
2.15-3.45 pm	PhD Presentations (see Student presentation schedule)	Room 2.16-2.19, 3.01, 3.03, 3.07
3.45-4.15 pm	Coffee break	Graduate Centre (S07)
4.15-5.15 pm	Workshop 3 Professor Rebekah Russell-Bennett (QUT) and Professor Sharyn Rundle-Thiele (Griffith) Research: Dark Art or White Magic?	Room 2.16-2.18
5.15-5.30 pm	Wrap Up Professor Sharyn Rundle-Thiele (President of ANZMAC)	Room 2.16-2.18
5.45-7.30 pm	Doctoral Colloquium Dinner	The Shore Restaurant and Bar, Arbour View Cafes

SUNDAY 30 NOVEMBER 2014		Graduate Centre (S07)
8.30-9.00 am	Continental Breakfast	Graduate Centre (S07)
9.00-10.00 am	Workshop 4— Finding Life, Leisure, and Pleasure in the PhD Treadmill Associate Professor Zeynep Arsel (Concordia University)	Room 2.16-2.18
10.00-11.00 am	Workshop 5— How to Publish from Your PhD and Create a Research Pipeline Professor Jill Sweeney (University of Western Australia) and Associate Professor Tracey Danaher (Monash University)	Room 2.16-2.18
11.00-11.30 am	Coffee Break	Graduate Centre (S07)
11.30 am-1.00 pm	PhD Presentations (see Student presentation schedule)	Room 2.16-2.19, 3.01, 3.03, 3.07
1.00-2.00 pm	Lunch	Graduate Centre (S07)
2.00-2.45 pm	PhD Presentations (see Student presentation schedule)	Room 2.16-2.19, 3.01, 3.03, 3.07
2.45-3.15 pm	Coffee Break	Graduate Centre (S07)
3.15-4.30 pm	Workshop 6—Moving Forward, Q&A Dr Zeynep Arsel (Concordia University) and Professor Geoff Soutar (UWA)	Room 2.16-2.18
4.30-4.45 pm	Closing Dr Denni Arli and Associate Professor Helen Cherrier	S07, Room 2.16-2.18

Doctoral Colloquium Program

SATURDAY 29 NOVEMBER 2014						Graduate Centre (S07)
8.00-9.00 am	Registration and greetings					Foyer
9.00-9.15 am	Welcome from the DC Co-chairs Dr Denni Arli and Associate Professor Helene Cherrier					
9.15-10.15 am	Opening Workshop—Advancing Your Early Academic Career Associate Professor Ekant Veer (University of Canterbury)					Room 2.16-2.18
10.15-11.15 am	Workshop 2—Life as an Academic, A Creative, Sustained and Fun Adventure Professor Russel Belk (York University)					Room 2.16-2.18
11.15-11.45 am	Coffee break					
11.45 am-1.15 pm	PhD Presentation					
	Room 2.16-2.18	Room 2.17	Room 2.19	Room 3.01	Room 3.03	Room 3.07
11.45 am-12.30 pm	When are two brands better than one? Investigating the impact of advertising dual-brands on correct branding	Trust me, I’m a (tele)doctor: Service provider’s experiences of healthcare service virtualisation	Branded content—Kindling the brand romance	The role of emotions toward luxury brands in the consumers’ responses to brand extensions	Advertising appeals and effectiveness in social media banner advertising. A cross-cultural study of India, Finland, Sweden and Vietnam.	New perspectives on democratisation in the luxury market: The engagement of consumers in marketplace meanings
	Presenter: Cathy Nguyen (UniSA) Reviewer: Professor Mark Uncles Professor Russell Belk	Presenter: Teegan Green (UQ) Reviewer: Associate Professor Ekant Veer Associate Professor Karen Fernandez	Presenter: Krahmalov, Jacki (UWS) Reviewer: Associate Professor Zeynep Arsel Associate Professor Helene Cherrier	Presenter: Naser Pourazed (Flinders) Reviewer: Professor Jill Sweeney (UWA) Professor Ulrike Gretzel (UQ)	Presenter: Nguyen Han (Vaasa) Reviewer: Dr Owen Wilson (Griffih) Dr Dewi Tojib (Monash)	Presenter: Jamal Abarashi (Otago) Reviewer: Professor Geoff Soutar (UWA) Associate Professor Liliana Bove (UniMelb)

12.30-1.15 pm	Strategically managing the stories of brands: conceptualising, managing and measuring the 'brand story' concept	Exploring consumer behaviour in the context of life-threatening illness	Conceptual paper: everyday utopianism and brand connection	The role of consumption externalities in consumer decisions of separated services	Flirting with a holiday destination: a study on the process of place bonding with a focus on emotions and experiences	The influence of colour and shape on brand identification and meaning
	Presenter: Mohammed Fakiha (RMIT)	Presenter: Narjess Abroun (RMIT)	Presenter: Rebecca Dare (UniMelb)	Presenter: Karen Kao (Adelaide)	Presenter: Shabnam Seyedmehdi (Otago)	Presenter: Jinyoung Choi (U of Auckland)
	Reviewer: Professor Mark Uncles	Reviewer: Associate Professor Ekant Veer	Reviewer: Associate Professor Zeynep Arsel	Reviewer: Professor Jill Sweeney (UWA)	Reviewer: Dr Owen Wright (Griffith)	Reviewer: Professor Geoff Soutar (UWA)
	Professor Russel Belk	Associate Professor Karen Fernandez	Associate Professor Helene Cherrier	Professor Urlike Gretzel (UQ)	Dr Dewi Tojib (Monash)	Associate Professor Liliana Bove (UniMelb)

1.15-2.15 pm Lunch

2.15-3.45 pm PhD Presentation 2

Room 2.16-2.18 Room 2.17 Room 2.19 Room 3.01 Room 3.03 Room 3.07

2.15-3.00 pm	Human brands emotional attachment: the key personality characteristics of strong human brands.	The role of memory in consumer choice: does it differ for goods and services brands?	The challenges of positioning a 'broad brand': an analysis of TV broadcasting brand positioning in the digital age	The role of psychographic variables on green purchase intentions for a low involvement product	Study of Chinese 'consumption face'	Integrating green consumption dimension: consumer styles inventory (CSI) scale refinement and validation
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Presenter: Marcela Moraes (Murdoch)	Presenter: Rachel Fuller (Loughborough University)	Presenter: Claudia Gonzales (UQ)	Presenter: Aysen Coskun (Nevsehir Uni)	Presenter: Raymond Xia (Otago)	Presenter: Fred Musika (Massey)
Reviewer: Dr Stanislav Stakhovych (Monash)	Reviewer: Professor Hamen Oppewal (Monash)	Reviewer: Dr Lynda Andrews (QUT)	Reviewer: Professor Geoff Soutar (UWA)	Reviewer: Dr Shelagh Ferguson (Otago)	Reviewer: Dr Juergen Gnoth (Otago)
Professor Ian Wilkinson (USyd)	Dr Cyntia Webster (Macquarie)	Associate Professor Yelena Tsarenko (Monash)	Dr Lara Stocchi (Lboro)	Dr Umar Burki (HBV)	Dr Kaisa Lund (LNU)

3.00-3.45 pm	Consumers' confidence in competitive positions: antecedents and effects on segment preferences	Evaluating the impact of sponsorships on sponsors' community based brand equity.	Impact of service recovery methods to Customer loyalty: a mediation of service recovery satisfaction (SATCOM) Drivers	Mixing it up: encouraging Finnish children to eat fruit	Understanding the relationships among travel motivation, service quality, perceived value, customer satisfaction and behavioural intentions in ecotourism	Changing littering behaviour among Saudi Arabian community A social marketing approach.
	Presenter: Anne-Maree O-Rourke (UTS) Reviewer: Dr Stanislav Stakhovych (Monash) Professor Ian Wilkinson (USyd)	Presenter: Lenny Vance (USC) Reviewer: Professor Hamen Oppewal (Monash) Dr Cyntia Webster (Macquarie)	Presenter: Yeah Shan Beh (UniAuckl) Reviewer: Dr Lynda Andrews (QUT) Associate Professor Yelena Tsarenko (Monash)	Presenter: Ville Lahtinen (Griffith) Reviewer: Professor Geoff Soutar (UWA) Dr Lara Stocchi (Lboro)	Presenter: Joowon Ban (CQU) Reviewer: Dr Shelagh Ferguson (Otago) Dr Umar Burki (HBV)	Presenter: Yara Almosa (Griffith) Reviewer: Dr Juergen Gnoth (Otago) Dr Kaisa Lund (LNU)

3.45-4.15 pm Coffee break

4.15-5.15 pm Workshop 3—Research: Dark Art or White Magic? Room 2.16-2.18
Professor Rebekah Russell-Bennett; Professor Sharyn Rundle-Thiele (Griffith)

5.15-5.30 pm Wrap Up Room 2.16-2.18
Professor Sharyn Rundle-Thiele (ANZMAC President)

5.45-7.30 pm Doctoral Colloquium Dinner The Shore
Restaurant and Bar, Arbour View Cafes

8.30-9.00 am Continental breakfast

9.00-10.00 am **Workshop 4**—Finding Life, Leisure, and Pleasure in the PhD Treadmill **Room 2.16-2.18**
Associate Professor Zeynep Arsel (Concordia University)

10.00-11.00 am **Workshop 5**—How to Publish from Your PhD and Create a Research Pipeline **Room 2.16-2.18**
Professor Jill Sweeney (University of Western Australia) and Associate Professor Tracey Danaher (Monash University)

11.00-11.30 am Coffee break

11.30-1.00 am PhD Presentation 3

Room 2.16-2.18 Room 2.17 Room 2.19 Room 3.01 Room 3.03

11.30 am-12.15 pm The conceptualisation and measurement of negative engagement
Should Foreign Brands Localise Their Packaging? A Comparison Of Hedonic And Utilitarian Products
Enabling customer insights through learning based on real-time customer analytics
The influence of consumer motivations on eWOM contribution: Do individualist and collectivist cultural characteristics matter?
Healthy Eating in the Australian Defence Force: A Social Marketing Study

Presenter: Loic Li (UniAuckland) **Presenter:** Khan, Huda (UniSA) **Presenter:** Stefanie Kramer (Deakin) **Presenter:** Saranya Labsomboonsiri (QUT) **Presenter:** Carins, Julia (Griffith)
Reviewer: Professor Jenni Romaniuk (UniSA) **Reviewer:** Dr Liliana Bove (Uni Melb) **Reviewer:** Associate Professor Tracey Danaher (Monash) **Reviewer:** Professor Aron O'Cass (UTas) **Reviewer:** Dr Swetlana Bogomolova (UniSA)
Reviewer: Dr Jimmy Wong (Monash) **Reviewer:** Professor Geoff Soutar (UWA) **Reviewer:** Professor Peter Thirkell (VUW) **Reviewer:** Dr Stephen Dann (ANU)

12.15-1.00 pm Factors Impacting Food Decision Making Amongst Consumers with Special Dietary Needs in the Purchase of Processed Packaged Foods in Supermarkets
The influence of marketing communications on the evolution of shopper behaviour in both offline and online retail channels
The Antecedents of Donor Retention for Non Profit Organisations at Tanzania Education Authority: An Empirical Analysis
The Effects of Social Setting and Portion Size on Food Consumption Amount
On premise alcohol consumption: A stakeholder perspective in social marketing

Presenter: Elizabeth Andrews (USQ)	Presenter: Jason Pallant (Monash)	Presenter: Michael Mawondo (Deakin)	Presenter: Marcus Tan (Bond)	Presenter: Nuray Buyucek (Griffith)
Reviewer: Professor Jenni Romaniuk (UniSA)	Reviewer: Dr Liliana Bove (Uni Melb)	Reviewer: Associate Professor Tracey Danaher (Monash)	Reviewer: Professor Aron O'Cass (UTas)	Reviewer: Dr Svetlana Bogomolova (UniSA)
Dr Jimmy Wong (Monash)	Professor Geoff Soutar (UWA)		Professor Peter Thirkell (VUW)	Dr Stephen Dann (ANU)

1.00-2.00
pm Lunch

2.00-2.45
pm PhD Presentation 4

Room 2.16-2.18

Room 2.19

Room 3.01

Room 3.03

2.00-2.45
pm Can nudging principles encourage behaviours associated with obesity prevention?

Presenter:
Amy Wilson (UniSA)
Reviewer:
Professor Janet Hoek
Dr Nadia Zainuddin (UOW)

Sensory Perception, Attitudes and Decisions: Haptics and the Need for Touch

Presenter:
David Harris (CQU)
Reviewer:
Professor Peter Danaher (Monash)
Dr Stephen Dann (ANU)

How Valence and Arousal Affect Unplanned Buying Behaviour

Presenter:
Abedniya Abed (Monash)
Reviewer:
Professor Andrew Parsons (AUT)
Professor Jill Sweeney (UWA)

Market Participation and Market Mobility of Smallholder Farmers in a Developing Economy

Presenter:
Marcia Kwaramba (Monash)
Reviewer:
Professor Ian Wilkinson (USyd)
Dr Junzhao Ma (Monash)

2.45-3.15
pm Coffee break

3.15-4.30
pm Workshop 6—Moving forward and Q&A
Dr Zeynep Arsel (Concordia University) and Professor Geoff Soutar (UWA)

Room 2.16-2.18

4.30-4.45
pm Closing
Dr Denni Arli and Associate Professor Helene Cherrier

Room 2.16-2.18